

## Statement of Considerations

REQUEST BY WESTINGHOUSE POWER GENERATION, A  
FORMER DIVISION OF CBS CORPORATION, FOR AN  
ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS  
IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR  
UNDER DEPARTMENT OF ENERGY GRANT NO.  
DE-FG21-94MC32071; DOE WAIVER DOCKET W(A)-98-005  
[ORO-736]

Westinghouse Power Generation, a former division of CBS Corporation (hereinafter referred to as "the Grantee"), has requested an advance waiver of worldwide rights in Subject Inventions made in the course of or under Department of Energy (DOE) Grant No. DE-FG21-94MC32071. The goal of the grant was to perform system analysis, selection and optimization to develop the next generation of gas-fired advanced turbine systems (ATS's) for green field and repowered electricity generation applications. The goal of the ATS program is to develop and commercialize ultra-high efficiency, environmentally superior, and cost-competitive gas turbine systems for base-load applications in the utility, independent power producer, and industrial markets. This work was sponsored by the Office of the Fossil Energy. The original grantee was the Westinghouse Electric Corporation, which subsequently changed its name to CBS Corporation.

The Grantee originally requested a waiver of foreign and domestic patent rights to 4 identified inventions made in the course of or under the subject grant. Subsequently, several additional inventions were reported to the DOE as subject inventions under this grant. The Department has determined that it would be more efficient to convert the Grantee's request for waiver of rights to identified inventions to a request for an advance waiver of patent rights.

The period of performance of the above-referenced grant was from May 17, 1995, to December 31, 1996. Petitioner cost shared \$241,000 or 57.9% of the \$416,000 value of the grant. The grant is currently in the close-out process, but has not been retired.

The Grantee is technically competent in the field of technology of the subject grant. As mentioned in its response to question 4 of its updated waiver petition dated May 29, 1998, the Grantee is a long-standing global leader in the design and manufacture of high performance combustion turbine generators. Since introducing the first industrial combustion turbine in the late 1940's, the Grantee has successfully introduced and marketed 19 distinct combustion turbine models resulting in over 1500 Grantee-designed combustion turbines in operation world-wide. The ATS engine will be the next model in a series of very successful, large heavy-duty gas turbines developed by the Grantee. Also indicative of the Grantee's continual advancement of combustion turbine technology, the Grantee has an extensive patent portfolio (see the list of Grantee-owned patents in Attachment 1 to the updated waiver petition). The Grantee has developed an aggressive commercialization plan that is aimed at getting ATS technology into the

commercial market in the shortest possible time. Therefore, the Grantee's experience, expertise and commitment will contribute substantially to commercialization of the inventions made under the Grant.

As a major national and international supplier of power generation equipment, the Grantee has an established commercial position in the power generation field. It is the second largest commercial supplier of power generation gas turbines in the United States and the fourth single largest supplier in the world. Since 1990, the Grantee has invested over \$200 million in U.S. manufacturing facilities and over \$180 million in Advanced Combustion Turbine Technology. The Grantee has commercialized innovative technology that has allowed the utility industry to continually improve economics, while generating environmentally safe and reliable electric power. Its utility turbines have been sold as commercial items to electric utilities, independent power producers and industrial entities that generate their own power and heat source.

The grant contains the standard DOE long form Patent Rights clause. CBS has approved the Patent Rights - Waiver clause (see Attachment A), and upon approval of this waiver request, that waiver clause will be incorporated into the grant as a no-cost modification.

The Patent Rights - Waiver clause accepted by the Grantee includes march-in rights (35 U.S.C. § 203), the granting of licenses to background patents necessary for practicing subject inventions, retention by the Government of a license (35 U.S.C. § 202(c)(4)), preference for U.S. industry (35 U.S.C. § 204), and U.S. Competitiveness provisions. The clause also contains a provision requiring the Grantee to obtain DOE approval of any transfer or other alienation of any intellectual property first specifically developed by the Grantee in the performance of the work funded under the DOE ATS Program -- including technical data and subject inventions (hereafter termed "Intellectual Property") -- to any foreign company or American subsidiary of a foreign company. Such approval is contingent on agreement by the company to whom such rights are transferred or otherwise alienated to substantially manufacture any specifically developed ATS products embodying any such Intellectual Property or produced through the use of any such Intellectual Property in the United States. In the event the company acquiring such rights does not meet the substantial United States manufacture requirement, the clause provides for repayment of the funds contributed by DOE to all phases of the Grantee's ATS program, licensing or return to DOE of foreground Intellectual Property and licensing of background Intellectual Property.

Granting of the waiver should have little effect on competition and market concentration since this is one of many previously or yet-to-be developed similar technologies in the marketplace. Another company has a cooperative agreement with DOE to develop competing turbines and has been granted a waiver, and other companies are developing similar technologies without DOE assistance. Therefore there should not be undue market concentration of the Grantee's products. Further, grant of the waiver will increase the Grantee's incentive to develop ATS technologies, and thus improve the lifetimes and efficiencies of combustion turbine engines.

The Grantee requires a substantial degree of exclusivity to protect the initial commitment of resources necessary to bring subject inventions to commercialization. However, according to its response to question 9 of the updated waiver petition, the Grantee also has a generally accepted and long standing corporate policy to license its technology on fair and reasonable terms to responsible parties. Thus, it is not the Grantee's intention to exclude others from the field, but the degree of exclusivity requested will protect the risk capital needed to bring the technology represented by the subject inventions to the public.

DOE recognizes that the Grantee may acquire any rights including title to inventions conceived or first actually reduced to practice by lower-tier subcontractors, except for subcontractors subject to Public Law 96-517 (35 U.S.C. §§ 200-211) and National Laboratories, during the performance of these subcontracts. The Grantee's election to retain title to any subject invention made by a subcontractor is subject to the following: the subcontractor providing written notice to the DOE Patent Counsel relinquishing their right to ask for a waiver and agreeing to abide by the terms of its subcontract; the Government's march-in rights; retention by the Government of a license; preference for U.S. industry; U.S. Competitiveness provisions; and the other provisions of this clause. However, the Grantee shall not, as part of the consideration for awarding any subcontract, obtain rights in subcontractor's subject inventions.

On August 20, 1998, CBS Corporation sold Westinghouse Power Generation to Siemens Power Generation Corporation. The new entity is named the Siemens Westinghouse Power Corporation, is incorporated in Delaware and has its headquarters in Orlando, Florida. CBS Corporation has requested that DOE enter into a novation agreement with CBS and Siemens Westinghouse, to transfer responsibility for the performance of the subject grant to Siemens Westinghouse. If the novation occurs, the financial commitments made by CBS under the subject Grant will be assumed by the new corporation, and Siemens Power Generation will make available significant background information for incorporation into the ATS system and process. To the extent this background information is subject to the data and patent provisions of the grant, the Government will get rights in it.

CBS has requested DOE's approval to assign any rights to Subject Inventions granted by this waiver to Siemens Westinghouse, in the event the novation is approved. Siemens has agreed to comply with the terms and conditions of the Patent Rights - Waiver clause approved by the Grantee, including the provisions for licensing of background patents and data. DOE hereby grants its approval to transfer this waiver to the Siemens Westinghouse Power Corporation upon completion of a favorable determination under Section 2306 of the Energy Policy Act and the subsequent novation of the subject grant. No rights granted under this waiver to CBS shall transfer to Siemens Westinghouse until a favorable Section 2306 determination has been completed and the grant has been formally novated.

As described in Attachment 2 to the updated waiver petition dated May 29, 1998, Siemens Power Corporation is a well known name in power generation with over 150 years of technology development efforts to improve the economics and efficiency of producing electricity. Siemens

has a global presence in the design and supply of steam, combined cycle and hydro power plants, and of power generation equipment and control systems. Indicative of Siemens' continual advancement of combustion turbine technology, Siemens has an extensive patent portfolio (see the list of Siemens-owned patents in Attachment 3 to the updated waiver petition). Although Siemens' power generation business headquarters is located in Germany, it is well established as a major company in the United States, with nearly 50,000 U.S. employees in a wide range of electrical and electronic manufacturing fields. Thus, the Siemens Westinghouse Power Corporation unites two of the most famous names in electrical equipment manufacturing history. Siemens Westinghouse expects to implement the aggressive commercialization plan developed by CBS. The combined experience, expertise and commitment of Siemens and CBS will contribute substantially to commercialization of the inventions made under the grant.

As a composite of two major national and international suppliers of power generation equipment, the Siemens Westinghouse Power Corporation has an established commercial position in the power generation field. The new corporation is committed to the development of efficient power systems that operate in an environmentally sound manner. In the past, both companies have commercialized innovative technology that has allowed the utility industry to continually improve economics, while generating environmentally safe and reliable electric power. The formation of the new corporation is expected to accelerate the process of bringing the results of the DOE-sponsored ATS program to the marketplace through, among other things, access to additional project financing, which will allow an expansion of the business above CBS's corporate resources. The new corporation will sell combustion turbines as commercial items to electric utilities, independent power producers (non-utility power producers), and to industrial entities that generate their own power and heat sources.

The transfer of the waiver to the Siemens Westinghouse Power Corporation should have little effect on competition and market concentration. Siemens Westinghouse, as the successor of CBS, is in a better position to promote commercialization of the ATS technology but is not in a dominant position in the field. As noted above, another company has a cooperative agreement with DOE to develop competing turbines and has been granted a waiver, and other companies are developing similar technologies without DOE support. Thus, transfer of the waiver will not preclude competitors from competing for the same markets, but should allow Siemens Westinghouse to remain competitive in a global marketplace and will increase Siemens Westinghouse's incentive to develop ATS technologies. Siemens Westinghouse requires a substantial degree of exclusivity to protect the initial risk capital needed to commercialize the subject inventions. However, subject to the terms of the waiver, the new corporation agrees that the technology developed under this grant will be licensed on reasonable terms to responsible parties.



In view of the acceptable level of cost sharing by the petitioner, and the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted to CBS Corporation. Further, it is recommended that, upon completion of a favorable determination under Section 2306 of the Energy Policy Act and completion of the novation, the waiver be transferred to the Siemens Westinghouse Power Corporation.



Lisa A. Jarr  
Patent Counsel

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted to the CBS Corporation. This waiver shall not apply to a modification or extension of the cost-shared grant where, through such a modification or extension, the purpose, scope or cost of the grant has been substantially altered. The waiver shall apply to Siemens Westinghouse upon a favorable Section 2306 determination and novation of the grant.

CONCURRENCE:



George Rudins  
Deputy Assistant Secretary  
Office of Coal and Power Systems

Date: 1/9/99

APPROVAL:



Paul A. Gottlieb  
Assistant General Counsel for Technology  
Transfer and Intellectual Property

Date: 2-12-99

(ii) Submits the final report required by paragraph (e)(2)(ii) of this clause, whichever is later.

(2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in paragraph (m)(1) of this clause, the Contractor:

(i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer; or

(ii) Contending that the subject invention is not a subject invention, the Contractor nevertheless discloses the subject invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer, or

(iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Contracting Officer to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph shall be in addition to and shall not supersede any other rights and remedies which the Government may have with respect to subject inventions.

(t) *U.S. Competitiveness.*

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

(u) *Adequate Recognition.*

In the event that any intellectual property first specifically developed by the Participant in the performance of the work funded under the DOE Advance Turbine System (ATS) Program, comprised of Technical Data and subject inventions (hereafter termed "Intellectual Property"), are contemplated to be assigned, transferred, exclusively licensed or otherwise alienated from the Participant to a foreign company and/or an American subsidiary of a foreign company, such transfer or other alienation shall be subject to the approval of the DOE or its successor(s).

Such approval shall be contingent upon an agreement by the company to whom such rights are transferred or otherwise alienated that any specifically developed ATS products embodying any such Intellectual Property or produced through the use of any such Intellectual Property will be manufactured substantially in the United States. The DOE and the Participant